AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-3. (Canceled).

4. (Currently Amended) The method according to ~~claim 3~~claim 19, wherein the adenovirus or a fragment thereof is selected from the group consisting of wild type human ~~adenovirus~~adenoviruses, recombinant ~~adenovirus~~adenoviruses, and fragments thereof.

5-7. (Canceled).

8. (Currently Amended) The method according to ~~claim 7~~claim 19, wherein the ~~genome of the recombinant virus comprises at least~~ regulatory sequences ~~necessary to~~ direct the expression of the heterologous protein in at least one antigen presenting cell of the mammal.

9. (Original) The method according to claim 8, wherein the regulatory sequences comprise promoter sequences selected from the group consisting of cytomegalovirus early promoter (CMV IEP), Rous sarcoma virus long terminal repeat promoter (RSV LTR), myeloproliferative sarcoma virus long terminal repeat (MPSV LTR), simian virus 40 early promoter (SV40 IEP), and major late promoter of the adenovirus.

10. (Currently Amended) The method according to ~~claim 1~~claim 19, further comprising administering an additional virus or a fragment thereof, wherein the additional virus or a fragment thereof is the same as or different than the ~~virus~~adenovirus or a fragment thereof.

11. (Currently Amended) The method according to ~~claim 1~~claim 19, further comprising administering an additional nucleic acid sequence encoding the heterologous

protein~~, wherein the additional nucleic acid sequence is the same as or different than the nucleic acid sequence~~.

12. (Currently Amended) The method according to ~~claim 1~~claim 19, further comprising administering the heterologous protein.

13. (Currently Amended) The method according to ~~claim 1~~claim 19, wherein the heterologous protein ~~or a fragment thereof~~ is selected from the group consisting of proteins that are presented by a class I major histocompatibility molecule (CMH I), a class II major histocompatibility molecule (CMH II), or both a class I major histocompatibility molecule and a class II major histocompatibility molecule.

14. (Currently Amended) The method according to ~~claim 1~~claim 19, wherein the heterologous protein is selected from the group consisting of secreted proteins, membrane proteins, receptors, intracellular proteins, and nuclear proteins.

15. (Original) The method according to claim 14, wherein the secreted protein is selected from the group consisting of neuromediators, hormones, interleukines, lymphokines, interferons, chemokines, and growth factors.

16. (Currently Amended) The method according to ~~claim 1~~claim 19, wherein the mammal is selected from the group consisting of mouse, rat, rabbit, hamster, pig, cow, goat, sheep, horse, and primate.

17. (Currently Amended) The method according to ~~claim 1~~claim 19, wherein the administration of the ~~virus~~ recombinant adenovirus or a fragment thereof ~~and the nucleic acid sequence encoding the heterologous protein~~ is performed via ~~one or more techniques selected from the group consisting of~~ intravenous injection~~, intravaginal injection, intrarectal injection, intramuscular injection, and intradermic injection~~.

18. (Original) The method according to claim 17, wherein the intravenous injection is performed by retro-orbital sinus injection, tail injection, hepatic injection, femoral injection, or jugular injection.

19. (Currently Amended) A method of inhibiting, in a mammal, formation of neutralizing antibodies directed against a heterologous protein, ~~comprising~~wherein the method comprises:

administering to the mammal a recombinant ~~virus~~adenovirus or a fragment thereof, wherein the genome of ~~which~~ the recombinant adenovirus or a fragment thereof comprises ~~at least~~ a nucleic acid sequence encoding the heterologous protein and regulatory sequences, and wherein the recombinant adenovirus or a fragment thereof is administered in an amount sufficient to deplete or inhibit at least some antigen presenting cells of the mammal~~; and~~

~~optionally administering a virus or a fragment thereof, the genome of which does not express the heterologous protein~~.

20-22. (Canceled).

23. (Currently Amended) The method according to ~~claim 19~~claim 16, wherein the mammal is a mouse ~~and the recombinant virus is a recombinant adenovirus~~.

24-25. (Canceled).

26. (Currently Amended) The method according to ~~claim 24~~claim 23, wherein the amount of the recombinant adenovirus or a fragment thereof able to form plaques~~,~~ is equal to or greater than about ~~4 X 10~~^{9}8 X 10^9 pfu/mouse.

27. (Withdrawn) A method of inhibiting in a mammal formation of neutralizing antibodies directed against a heterologous protein, the method comprising:

(i) Optionally, co-administering to a first mammal, at least one virus and a nucleic acid sequence encoding the heterologous protein, the virus being administered simultaneously, sequentially or separately with the nucleic acid sequence, and determining at least one amount of the heterologous protein and the virus, sufficient to trigger an immune

response against the heterologous protein by the first mammal; optionally, re-performing step (i) until the amount is determined;

(ii) co-administering to a second mammal the nucleic acid sequence encoding the heterologous protein, in an amount sufficient to trigger an immune response against the heterologous protein, as determined at step (i) and prior to or simultaneously administering the virus, in an amount greater that the one determined at step (i) and sufficient to trigger an immune response against the virus and sufficient to deplete or inhibit at least some antigen presenting cells of the mammal, and determining for the second mammal at least one amount of the virus that reduces and/or suppresses the anti-heterologous protein immune response in the mammal; and re-performing step (ii) until the amount is determined; wherein the nucleic acid sequence encoding the heterologous protein is co-administered to the mammal prior to or simultaneously with a virus in an amount equal to or greater than the one determined at step (ii), and wherein the mammal produces neutralizing antibodies against the virus but produces no or few neutralizing antibodies against the heterologous protein.

28. (Withdrawn) The method according to claim 27, wherein the amount of the virus of step (ii) is at least twice the amount of the virus determined at step (i).

29. (Withdrawn) The method according to claim 27, wherein the virus is selected from the group consisting of adenovirus, adenovirus associated virus, retrovirus, pox virus.

30. (Withdrawn) The method according to claim 27, wherein the virus is an adenovirus.

31. (Withdrawn) The method according to claim 27, wherein the virus and the nucleic acid sequence encoding the heterologous protein are simultaneously co-administered as a recombinant virus, the genome of which comprises at least the nucleic acid sequence encoding the heterologous protein.

32. (Withdrawn) The method according to claim 27, further comprising administering the heterologous protein.

33. (Withdrawn) The method according to claim 27, wherein the nucleic acid sequence encodes human thrombopoietin.

34. (Withdrawn) The method according to claim 33, wherein the nucleic acid expresses human thrombopoietin under the control of the RSV promoter (AdRSVhuTPO).

35. (Withdrawn) A method of inhibiting in a mouse formation of neutralizing antibodies directed against an heterologous protein, the method comprising:

(i) optionally, administering to a first mouse, a recombinant adenovirus, the genome of which comprising at least a nucleic acid sequence encoding the heterologous protein, and determining the amount of recombinant adenovirus particles that triggers an immune response against the heterologous protein in the mouse without depleting or inhibiting at least some antigen presenting cells of the mouse, wherein:

(a) the amount of recombinant adenovirus particles is below 4×10^{10} particles, and/or

(b) the amount of the adenovirus particles able to form plaques is below 4×10^{9} pfu/mouse; and optionally, re-performing step (i) until the amount is determined;

(ii) administering to a second mouse an amount of recombinant adenovirus particles in an amount greater that the one determined at step (i) and sufficient to trigger an immune response against the recombinant adenovirus particles and sufficient to deplete or inhibit at least some antigen presenting cells of the mouse, and determining for the second mouse at least one amount of the recombinant adenovirus particles that reduces and/or suppresses the anti-heterologous protein immune response in the mouse, wherein:

(a) the amount of recombinant adenovirus particles is at least equal to or greater than 4×10^{10} particles, and/or

(b) the amount of the adenovirus particles able to form plaques is equal to or greater than 4×10^{9} pfu/mouse;

and optionally re-performing step (ii) until the amount is determined; wherein when one administers to the mouse the recombinant adenovirus particles in an amount equal to or greater than the one determined at step (ii), the mouse produces neutralizing antibodies against the adenovirus but produces no or few neutralizing antibodies against the heterologous protein.

36. (Withdrawn) The method according to claim 35, wherein the amount of the recombinant adenovirus particles of step (ii) is at least twice the amount of the recombinant adenovirus particles determined at step (i).

37. (Withdrawn) The method according to claim 35, further comprising administering the heterologous protein.

38. (New) The method according to claim 19, wherein:

administration of the recombinant adenovirus or a fragment thereof to the mammal causes a specific phenotypic result in the mammal; and

the specific phenotypic result is measured by molecular assays and/or clinical markers.